

***Remarks***

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1-20 are pending in the application, with claims 1 and 11 being the independent claims. Claims 1 and 11 are sought to be amended. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Rejections under 35 U.S.C. § 103***

In the Office Action, claims 1, 3-6, and 10-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Timm, *et al*, U.S. Patent No. 6,055,268 (Timm) in view of Barton, *et al*, U.S. Patent No. 6,449,246 (Barton). Applicant respectfully traverses this rejection.

In rejecting the claims, the Examiner states that although Timm does not teach "that a receiver comprises a plurality of demodulator[s], Barton *et al*. discloses a multicarrier personal access communication system with a receiver ... comprising a plurality of demodulator[s] ... and in order to detect the over-the-air transmission from transmitter via plurality of processing paths for 'diversity reception' and produce the 'best' received signal." (Office Action, pg. 3). Applicant respectfully disagrees with the Examiner's understanding of Barton.

Barton discloses a receiver that includes "a plurality of receiving paths 401, ..., 402 (e.g., receiving antennas) to detect the propagating RF signal from transmitter 300. At the front end of the receiver 400, a plurality of essentially identical parallel paths process the incoming signal detected by each corresponding antenna." (Barton, col. 13, lines 56). Thus, in Barton, each receiving path processes the same signal. The results generated by each receiving path are then combined in down-stream circuitry to produce the "best" signal for detection. (Barton, col. 14, lines 37-48). The chosen symbol set (i.e., "best signal") is then fed into a demodulator 460. (Barton, col. 14, lines 48-50).

Barton does not disclose "a plurality of demodulators, wherein each of the plurality of demodulators demodulates a different one of the plurality of frequency bands of the multi-tone, multi-band signal," as recited in Applicant's amended claim 1. Furthermore, Barton does not disclose a method comprising "dividing the multi-tone, multi-band signal into a plurality of data signals, each data signal having a plurality of tones in one of the plurality of frequency bands; and demodulating each of the plurality of data signals in a separate demodulator using a discrete Fourier transform," as recited in Applicant's amended claim 11.

Applicant respectfully submits that the combination of Timm and Barton fails to teach or suggest all the features of amended independent claims 1 and 11. Applicant therefore requests that the Examiner reconsider and withdraw this rejection. For at least these reasons, and further in view of their own features, claims 3-6 and 10 and 12-14 which depend from claims 1 and 11, respectively, are patentable over the combination of Timm and Barton. Reconsideration and withdrawal of the ground of rejection is therefore respectfully requested.

In the Office Action, claim 2 was rejected under 35 U.S.C. §103(a) as being unpatentable over Timm in view of Barton and further in view of Lee, *et al.*, U.S. Patent No. 5,818,296 (Lee). Applicant respectfully traverses this rejection. Claim 2 depends from claim 1. Lee does not overcome all of the deficiencies of Timm and Barton relative to claim 1 described above. For at least these reasons, and further in view of its own features, claim 2 is patentable over the combination of Timm, Barton, and Lee. Reconsideration and withdrawal of the ground of rejection is therefore respectfully requested.

Claims 7, 8, 15, and 17 were rejected under 35 U.S.C. §103(a) as being unpatentable over Timm in view of Barton and further in view of Ho, *et al.*, U.S. Patent 5,317,596 (Ho). Applicant respectfully traverses this rejection. Claims 7 and 8 depend from claim 1 and claims 15 and 17 depend from claim 11. Ho does not overcome all of the deficiencies of Timm and Barton relative to claims 1 and 11 described above. For at least these reasons, and further in view of their own features, claims 7, 8, 15, and 17 are patentable over the combination of Timm, Barton, and Ho. Reconsideration and withdrawal of the ground of rejection is therefore respectfully requested.

Claims 9 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over Timm in view of Barton and further in view of Agee, *et al.*, U.S. Patent 6,128,276 (Agee). Applicant respectfully traverses this rejection. Claims 9 depends from claim 1 and claim 16 depends from claim 11. Agee does not overcome all of the deficiencies of Timm and Barton relative to claims 1 and 11 described above. For at least these reasons, and further in view of their own features, claims 9 and 16 are patentable over the

combination of Timm, Barton, and Agee. Reconsideration and withdrawal of the ground of rejection is therefore respectfully requested.

Claim 18 was rejected under 35 U.S.C. §103(a) as being unpatentable over Timm in view of Barton and further in view of Feher, *et al*, U.S. Patent 6,470,055 (Feher).

Applicant respectfully traverses this rejection. Claim 18 depends from claim 1. Feher does not overcome all of the deficiencies of Timm and Barton relative to claim 1 described above. For at least these reasons, and further in view of its own features, claim 18 is patentable over the combination of Timm, Barton, and Feher. Reconsideration and withdrawal of the ground of rejection is therefore respectfully requested.

Claims 19 and 20 were rejected under 35 U.S.C. §103(a) as being unpatentable over Timm in view of Barton and further in view of Feher and further in view of Kahre, *et al*, U.S. Patent 5,680,388 (Kahre). Applicant respectfully traverses this rejection. Claims 19 and 20 depend from claim 1. Kahre does not overcome all of the deficiencies of Timm and Barton relative to claim 1 described above. For at least these reasons, and further in view of their own features, claims 19 and 20 are patentable over the combination of Timm, Barton, Feher, and Kahre. Reconsideration and withdrawal of the ground of rejection is therefore respectfully requested.

### ***Conclusion***


All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the

outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

  
Robert Sokohl  
Attorney for Applicant  
Registration No. 36,013

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1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600